



MOTONAV™ TN500/TN700 Series

Professional Installation Car Kit Guide

congratulations

The Motorola Professional Installation Car Kit makes integration of the MOTONAV™ TN500 and TN700 series devices to your vehicle entertainment system simple and quick.

With compatible vehicles, the Professional Installation Car Kit offers these features:

- Playing of MOTONAV hands-free call audio through your vehicle's speaker.
- Power connection to your MOTONAV device.
- Mute of the vehicle entertainment system audio (pass-through to enabled systems to pause CD/tape playback).

Motorola, Inc.
Consumer Advocacy Office
600 N. US Hwy 45
Libertyville, IL 60196
www.motorola.com

Note: Do not ship your accessory product to the above address. If you need to return your product for repairs, replacement, or warranty service, please contact the Motorola Customer Support Center at:

1-877-MOTOBLU (Motorola Bluetooth support)
1-800-331-6456 (United States)
1-888-390-6456 (TTY/TDD United States for hearing impaired)
1-800-461-4575 (Canada)

The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.

All features, functionality, and other product specifications, as well as the information contained in this user's guide are based upon the latest available information and are believed to be accurate at the time of printing. Motorola reserves the right to change or modify any information or specifications without notice or obligation.

MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners.

© 2009 Motorola, Inc. All rights reserved.

Software Copyright Notice

The Motorola products described in this manual may include copyrighted Motorola and third-party software stored in semiconductor memories or other media. Laws in the United States and other countries preserve for Motorola and third-party software providers certain exclusive rights for copyrighted software, such as the exclusive rights to distribute or reproduce the copyrighted software. Accordingly, any copyrighted software contained in the Motorola products may not be modified, reverse-engineered, distributed, or reproduced in any manner to the extent allowed by law. Furthermore, the purchase of the Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents, or patent applications of Motorola or any third-party software provider, except for the normal, non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

Manual Number: 68000202400-A

contents

install the car kit	5
before you begin	5
install the vehicle integration kit	
6	
connect the ISO cable.	7
install the microphone.	8
selective mute feature.	9
mount and connect the	
MOTONAV device	11
Safety Information.	15
Industry Canada Notice.	16
FCC Notice	16
Warranty.	16
Registration	18
Export Law	18
Recycling Information	19

install the car kit

before you begin

Caution: Only qualified personnel should install this car kit. Because of the wide variety of vehicle types and models, it may be necessary to contact the vehicle manufacturer for detailed installation information. If needed, contact the vehicle manufacturer for air bag information specific to the vehicle.

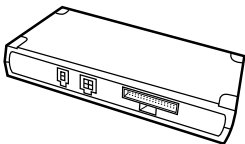
Caution: An air bag inflates with great force. **Do not** place objects, including communication equipment, in the area over the air bag or in the air bag deployment area. If the communication equipment is improperly installed and the air bag inflates, serious injury could occur.

Please follow these guidelines:

- Mount components securely on strong surfaces to prevent shifting that could cause injury or interfere with safe vehicle operation. Use the supplied mounting hardware as needed.
- Mounted components and attached wires or cables must not interfere with seating or leg space.
- Route cables so they are protected from pinching, sharp edges and crushing. Keep all in-line connectors easily accessible.
- The harness is intended for use in 12 Volt negative ground systems only. The harness draws less than 10 Amps. Confirm that the vehicle's electrical system can supply this current.

install the vehicle integration kit

The vehicle integration kit is the central connection point for the car kit. Connections to the vehicle, microphone, and MOTONAV device are made from the vehicle integration kit.

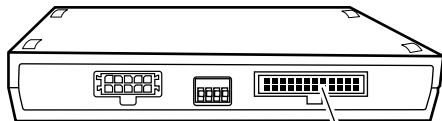


Mount the vehicle integration kit securely. The best location for the kit is under the dashboard. The kit should be protected from dirt and moisture, have adequate space for cooling, and allow for cable connections.

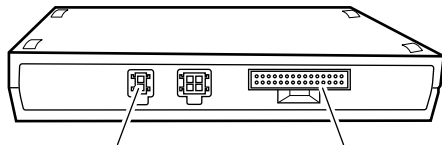
The vehicle integration kit should be secured after the rest of the hands-free system's components are installed and cables are secured.

Caution: The location **must not** interfere with the vehicle's air bag.

The vehicle integration kit consists of these connectors:



**ISO Cable
(connector A)**

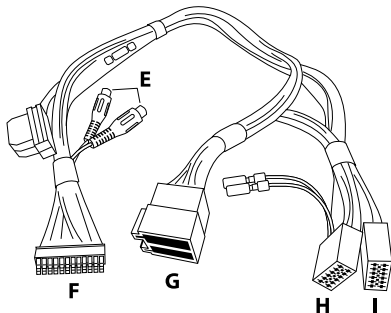


**Microphone
(connector C)**

**Pro-Install Cable
(connector B)**

connect the ISO cable

The ISO cable connects the vehicle integration kit to the vehicle wiring. It connects the vehicle's power, ignition, and entertainment system to the car kit.



- 1 Disconnect battery from vehicle.

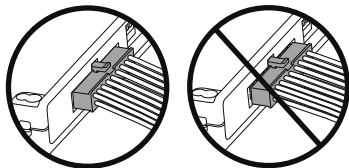
Caution: Removing battery power may set trouble codes that can only be reset by a factory diagnostic tool on some vehicles. Please check

6 install the car kit

with your vehicle manufacturer if you are unsure how your vehicle may react.

- 2 Disconnect appropriate connections on the vehicle audio system to allow installation of the ISO cable (and adapters, if needed).
- 3 Connect cable connectors H and I to the vehicle entertainment system.
- 4 Connect cable connector G to the vehicle wiring harness ISO connectors.
- 5 Connect cable connector F to vehicle integration kit connector A (shown on page 5).

Note: Make sure cable connector is plugged all the way into the vehicle integration kit.



6 Reconnect battery to vehicle.

Failure to follow these steps may cause the harness not to work properly and could damage the harness.

install with third-party vehicle specific harness

Some vehicles require a vehicle-specific harness (not supplied) that allows integration of the harness into the vehicle entertainment system. The connectors on the ISO interface cable are designed to connect directly to such a third-party harness. If you choose to use a vehicle-specific harness, follow the guidelines that came with the harness.

install the microphone

Caution: The location of the MOTONAV device **must not** interfere with the vehicle's air bag deployment. Also, the microphone cable should not pass in front of or interfere with the deployment of any vehicle

airbags. In particular, side airbags located with the windshield pillar or door jamb.

- 1 Mount the microphone in a suitable location using either the screw, velcro, or clip.
 - The preferred spot to mount the microphone is on the overhead console/dome light assembly near the front center of the vehicle, away from the window, pointed toward the driver's mouth.
 - Locate the microphone no more than 16 inches (40 cm) from the driver.
 - Do not allow anything (such as a rear-view mirror or sun visor) to block the path between the microphone and the driver.
 - Mount the microphone firmly so that vibrations do not affect audio quality.
 - Refrain from locating the microphone directly in the path of heat/AC vents.

- Refrain from mounting the microphone on door pillars or windows that can transmit exterior wind noise to it.
 - Do not attach microphone to the vehicle's visor.
- 2 Route the microphone cable down the side of the windshield, through the dash, and to the vehicle integration kit.
 - 3 Connect the microphone to the vehicle integration kit connector C (shown on page 5).

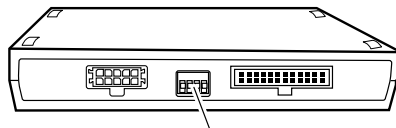
selective mute feature

Whenever your car kit plays audio or a hands-free call, it automatically disconnects (or “takes over”) the speakers from the vehicle’s entertainment system.

However, some vehicles have features that play audio prompts over the vehicle entertainment system (such as audio navigation, parking sensors, etc.). In these

scenarios, you will still need to maintain an audio path (or “channel”) to the vehicle entertainment system.

On the vehicle integration kit, the multi-position DIP switch allows you to select a channel to remain connected to the vehicle entertainment system during hands-free calls.



**Selective Mute
DIP Switch**

Each position on the DIP switch corresponds to one of the four speaker channels.

switch	speaker channel
1	right - rear
2	right - front
3	left - rear
4	left - front

When the switches are all down (or "on"), then the channels are all connected to the MOTONAV device during a hands-free call. When one of the switches is moved up (or "off"), the audio from the vehicle entertainment system will pass-through to the speaker while in a call.

Note: Do not disable both front speaker channels or the hands-free audio will not be heard.

mount and connect the MOTONAV device

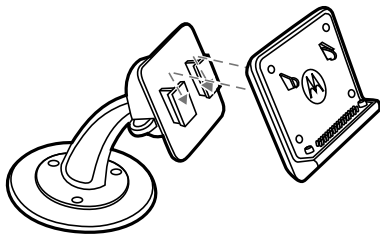
Caution: The location of the MOTONAV device **must not** interfere with the vehicle's air bag deployment.

Caution: DO NOT MOUNT IN A LOCATION THAT OBSTRUCTS DRIVER'S VISION OR INTERFERES WITH OPERATION OF THE VEHICLE.

- 1 Clean mounting surface thoroughly with an alcohol wipe (supplied).
- 2 If using adhesive to attach mounting arm to the dashboard, peel tape off of the adhesive pad (supplied) and apply to bottom of the mounting arm.

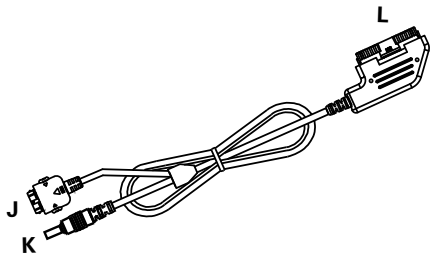
Note: If using screws to attach the mounting arm to the dashboard, do not use the adhesive pad.

- 3 Attach cradle to mounting arm.



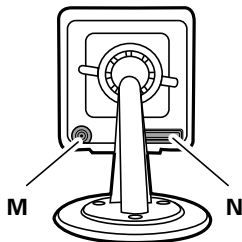
Note: Be sure to utilize the cradle that comes with the car kit. (The cradle included with the MOTONAV device may not have the same functionality.)

- 4 Locate the professional installation cable which is shown here.



- 5 Connect the car kit to the MOTONAV device cradle as follows:
- a Connect cable connector L to the vehicle integration kit connector B (shown on page 5).

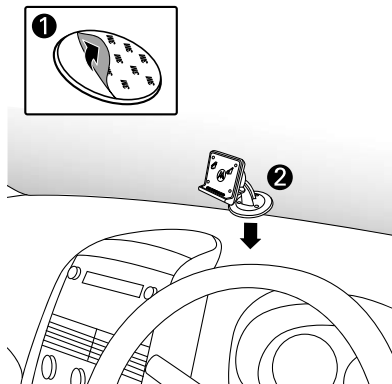
- b Connect cable connector J to the cradle connector N.



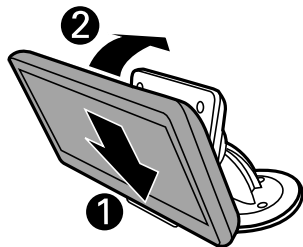
- c Connect cable connector K to the cradle connector M.
- 6 Before peeling tape from mounting arm, place mount and cradle with cables in desired location on dashboard to confirm they do not interfere with driver vision or airbags.

- 7 Peel tape from bottom of mounting arm and attach to vehicle's dashboard.

Note: Adhesive works best if it is left to cure (without the constant weight of the MOTONAV device) for about 24 hours.

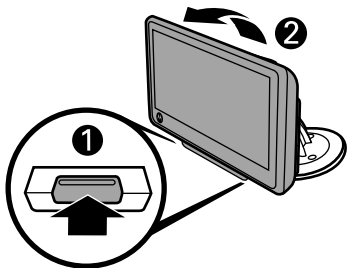


- 8 Adjust the cradle orientation and then tighten the mount using the wing nut on the back of the cradle.
- 9 Seat MOTONAV device on the pins at the bottom of the cradle.



- 10 Rotate the device back onto the cradle. Listen for a small click when it latches.

- 11** To remove the MOTONAV device, press and hold the button on the bottom of the cradle and rotate device forward.



Safety & General Information



IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR DEVICE.

Approved Accessories

Use of accessories not approved by Motorola, including but not limited to batteries, antennas, and convertible covers, may cause your mobile device to exceed RF energy exposure guidelines and may void your mobile device's warranty. For a list of approved Motorola accessories, visit our Web site at: www.motorola.com

Batteries & Chargers

Your battery, charger, or mobile device may contain symbols, defined as follows:

Symbol	Definition
	Important safety information follows.
	Do not let your battery, charger, or mobile device get wet.

Use & Safety for Battery-Powered Accessories

- Do not store or use your battery-powered accessory (such as a Bluetooth® headset or other device) in temperatures below -10°C (14°F) or above 60°C (140°F).
- Do not recharge your accessory in temperatures below 0°C (32°F) or above 45°C (113°F).
- Conditions inside a parked car can exceed this range. Do not store your accessory in a parked car.
- Do not store your accessory in direct sunlight.
- Storing your fully charged accessory in high-temperature conditions may permanently reduce the life of the internal battery.

- Battery life may temporarily shorten in low-temperature conditions.

Caution About High Volume Usage

Warning: Exposure to loud noise from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the volume sound level, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect. To protect your hearing:

- Start your volume control at a low setting and use as low a volume as possible.
- Limit the amount of time you use headsets or headphones at high volume.
- Where possible, use your headset in a quiet environment with low background noise.
- Avoid turning up the volume to block out noisy surroundings.
- Turn the volume down if you can't hear people speaking near you.

If you experience hearing discomfort, including the sensation of pressure or fullness in your ears, ringing in your ears, or muffled speech, you should stop listening to the device through your headset or headphones and have your hearing checked by your doctor.

Smart Practices While Driving

Using a mobile device while driving may cause distraction. End a call if you can't concentrate on driving. Input information about your destination and route prior to your drive. Do not input data while driving. Keep your eyes on the road while driving and listen to the verbal instructions. Also, using a mobile device or accessory may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.

Responsible driving practices can be found at www.motorola.com/callsmart (in English only).

Industry Canada Notice to Users

Operation is subject to the following two conditions: (1) This device may not cause interference and (2) This device must accept any interference, including interference that may cause undesired operation of the device. See RSS-GEN 7.1.5.

FCC Notice to Users

The following statement applies to all products that have received FCC approval. Applicable products bear the FCC logo, and/or an FCC ID in the format FCC-ID:xxxxxx on the product label.

Motorola has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment. See 47 CFR Sec. 15.21.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. See 47 CFR Sec. 15.19(3).

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Motorola Limited Warranty for the United States and Canada

What Does This Warranty Cover?

Subject to the exclusions contained below, Motorola, Inc. warrants its telephones, pagers, messaging devices, and consumer and professional two-way radios (excluding commercial, government or industrial radios) that operate via Family Radio Service or General Mobile Radio Service, Motorola-branded or certified accessories sold for use with these Products ("Accessories") and Motorola software contained on CD-ROMs or other tangible media and sold for use with these Products ("Software") to be free from defects in materials and workmanship under normal consumer usage for the period(s) outlined below. This limited warranty is a consumer's exclusive remedy, and applies as follows to new Motorola Products, Accessories and Software purchased by consumers in the United States or Canada, which are accompanied by this written warranty:

Products and Accessories

Products Covered	Length of Coverage
Products and Accessories as defined above, unless otherwise provided for below.	One (1) year from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.
Decorative Accessories and Cases. Decorative covers, bezels, PhoneWrap™ covers and cases.	Limited lifetime warranty for the lifetime of ownership by the first consumer purchaser of the product.
Monaural Headsets. Ear buds and boom headsets that transmit mono sound through a wired connection.	Limited lifetime warranty for the lifetime of ownership by the first consumer purchaser of the product.

Products Covered	Length of Coverage
Consumer and Professional Two-way Radio Accessories.	Ninety (90) days from the date of purchase by the first consumer purchaser of the product.
Products and Accessories that are Repaired or Replaced.	The balance of the original warranty or for ninety (90) days from the date returned to the consumer, whichever is longer.

Exclusions (Products and Accessories)

Normal Wear and Tear. Periodic maintenance, repair and replacement of parts due to normal wear and tear are excluded from coverage.

Batteries. Only batteries whose fully charged capacity falls below 80% of their rated capacity and batteries that leak are covered by this limited warranty.

Abuse & Misuse. Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the product resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food; (c) use of the Products or Accessories for commercial purposes or subjecting the Product or Accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Motorola, are excluded from coverage.

Use of Non-Motorola Products and Accessories. Defects or damage that result from the use of Non-Motorola branded or certified Products, Accessories, Software or other peripheral equipment are excluded from coverage.

Unauthorized Service or Modification. Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola, or its authorized service centers, are excluded from coverage.

Altered Products. Products or Accessories with (a) serial numbers or date tags that have been removed, altered or obliterated; (b) broken seals or that show evidence of

tampering; (c) mismatched board serial numbers; or (d) nonconforming or non-Motorola housings, or parts, are excluded from coverage.

Communication Services. Defects, damages, or the failure of Products, Accessories or Software due to any communication service or signal you may subscribe to or use with the Products Accessories or Software is excluded from coverage.

Software

Products Covered	Length of Coverage
Software. Applies only to physical defects in the media that embodies the copy of the software (e.g. CD-ROM, or floppy disk).	Ninety (90) days from the date of purchase.

Exclusions (Software)

Software Embodied in Physical Media. No warranty is made that the software will meet your requirements or will work in combination with any hardware or software applications provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected.

Software NOT Embodied in Physical Media. Software that is not embodied in physical media (e.g. software that is downloaded from the Internet), is provided "as is" and without warranty.

Who is Covered?

This warranty extends only to the first consumer purchaser, and is not transferable.

What Will Motorola Do?

Motorola, at its option, will at no charge repair, replace or refund the purchase price of any Products, Accessories or Software that does not conform to this warranty. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products, Accessories or parts. No data, software or applications added to your Product, Accessory or Software, including but not limited to personal contacts, games

and ringer tones, will be reinstalled. To avoid losing such data, software and applications please create a back up prior to requesting service.

How to Obtain Warranty Service or Other Information

USA	Phones: 1-800-331-6456 Pagers: 1-800-548-9954 Two-Way Radios and Messaging Devices: 1-800-353-2729
Canada	All Products: 1-800-461-4575
TTY	1-888-390-6456
For Accessories and Software , please call the telephone number designated above for the product with which they are used.	

You will receive instructions on how to ship the Products, Accessories or Software, at your expense, to a Motorola Authorized Repair Center. To obtain service, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider, if applicable; (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number.

What Other Limitations Are There?

ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY, OTHERWISE THE REPAIR, REPLACEMENT, OR REFUND AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER, AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. IN NO EVENT SHALL MOTOROLA BE LIABLE, WHETHER IN CONTRACT OR TORT (INCLUDING NEGLIGENCE) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, ACCESSORY OR SOFTWARE, OR FOR ANY INDIRECT, INCIDENTAL,

SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, SOFTWARE OR APPLICATIONS OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS, ACCESSORIES OR SOFTWARE TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

Some states and jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or from one jurisdiction to another.

Product Registration

Online Product Registration:

www.motorola.com/us/productregistration

Product registration is an important step toward enjoying your new Motorola product. Registering permits us to contact you for product or software updates and allows you to subscribe to updates on new products or special promotions. Registration is not required for warranty coverage.

Please retain your original dated sales receipt for your records. For warranty service of your Motorola Personal Communications Product you will need to provide a copy of your dated sales receipt to confirm warranty status.

Thank you for choosing a Motorola product.

Export Law Assurances

This product is controlled under the export regulations of the United States of America and Canada. The Governments of the United States of America and Canada may restrict the exportation or re-exportation of this product to certain destinations. For further information contact the U.S. Department of Commerce or the Canadian Department of Foreign Affairs and International Trade.

Caring for the Environment by Recycling

This symbol on a Motorola product means the product should not be disposed of with household waste.



Disposal of your Mobile Device & Accessories

Please do not dispose of mobile devices or electrical accessories (such as chargers, headsets, or batteries) with your household waste. Do not dispose of your battery or mobile device in a fire. These items should be disposed of in accordance with the national collection and recycling schemes operated by your local or regional authority. Alternatively, you may return unwanted mobile devices and electrical accessories to any Motorola Approved Service Center in your region. Details of Motorola approved national recycling schemes, and further information on Motorola recycling activities can be found at: www.motorola.com/recycling



Disposal of your Mobile Device Packaging & Product Guide

Product packaging and product guides should only be disposed of in accordance with national collection and recycling requirements. Please contact your regional authorities for more details.

www.motorola.com

